



Page 1 of 2

FORM PTO-1449 <b>FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</b>			ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034			
			APPLICANT Khan et al.				
			FILING DATE February 15, 2001	GROUP 2826			
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
111	AA1	5,642,261	06/1997	Bond et al.			
	AB1	5,796,170	08/1998	Marcantonio			
	AC1	5,798,909	08/1998	Bhatt et al.			
	AD1	5,843,808	12/1998	Karnezos			
	AE1	5,999,415	12/1999	Hamzehdoost			
	AF1	6,028,358	02/2000	Suzuki			
	AG1	6,057,601	05/2000	Lau et al.			
	AH1	6,122,171	09/2000	Akram et al.			
	AI1	6,242,279 B1	06/2001	Ho et al.			
	AJ1	2002/0053731 A1	--	Chao et al.	257	708	MAY 08 2001
im	AK1	2002/0072214 A1	--	Yuzawa et al.	438	609	11/13/2001
<b>FOREIGN PATENT DOCUMENTS</b>							EIV
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
W	AL1	10-189835	07/1998	Japan	H01L	23/24	Yes No
	AM1	2000-286294	10/2000	Japan	H01L	21/60	Yes No
W	AN1	61-49446	03/1986	Japan	H01L	23/36	Yes No
AO1							Yes No
	AP1						Yes No
<b>OTHER (Including Author, Title, Date, Pertinent Pages, etc.)</b>							
W	AR	1	English-language Abstract of JP 10-189835, published July 21, 1998, 2 pages (last visited March 14, 2003).				
	AS	1	English-language Abstract of JP 2000-286294, published October 13, 2000, 2 pages (last visited March 14, 2003).				
W	AT	1	Karnezos, M., "An EPBGA Alternative," Advanced Packaging, June 1998, pages 90, 92, 94, and 96.				
EXAMINER				DATE CONSIDERED 01/01/2007			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							



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FORM PTO-149 FOURTH SUPPLEMENTAL INFORMATION <u>DISCLOSURE STATEMENT</u>		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
		APPLICANT Khan et al.	
		FILING DATE February 15, 2001	GROUP 2826

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
WA	AA2	2002/0096767 A1	—	Cote et al.	257	738	01/25/2001
W	AB2	2002/0098617 A1	—	Lee et al.	438	106	09/18/2001
W	AC2	2002/0180040 A1	—	Carmenforte et al.	257	738	05/30/2001
W	AD2	5,438,216	08/1995	Juskey et al.			
W	AE2	5,801,432	09/1998	Rostoker et al.			
W	AF2	5,953,589	09/1999	Shim et al.			
W	AG2	6,069,407	05/2000	Hamzehdoost			
W	AH2	09/849,537	—	Zhang et al.	—	—	05/07/2001
W	AI2	10/020,207	—	Khan et al.	—	—	12/18/2001
W	AJ2						
W	AK2						

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
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	AM2						No
	AN2						Yes
	AO2						No
	AP2						Yes

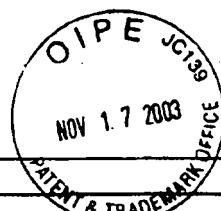
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

W	AR	2	English-language Abstract of JP 61-49446, published March 11, 1986, 1 page.	RECEIVED MAY 12 2003 TECHNICAL CENTER 2800
W	AS	2	Zhao, Z., Ph.D., "Thermal Design and Modeling of Packages," IEEE Short Courses, Broadcom Corporation, October 25, 2000, 95 pages.	
W	AT	2	Zhao, Z., Ph.D., "IC Package Thermal Issues and Thermal Design," ASAT, Inc., January 14, 2000, 98 pages, presented at 2 <sup>nd</sup> International Icepak User's Group Meeting, Palo Alto, CA, on February 7, 2000.	

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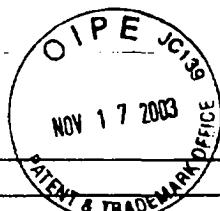
DATE CONSIDERED

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FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO. 1875.0210000		APPLICATION NO. 09/783,034		
			APPLICANT Khan et al.		FILING DATE February 15, 2001		
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
62	AA1	10/284,312	3/27/2003	Zhao et al.			10/31/2002
	AB1	10/284,340		Zhao et al.			10/31/2002
	AC1	10/201,891	12/12/2002	Zhao et al.			7/25/2002
	AD1	10/200,336	12/12/2002	Khan et al.			7/23/2002
	AE1	10/197,438	12/12/2002	Zhao et al.			7/18/2002
	AF1	10/201,309	12/19/2002	Khan et al.			7/24/2002
	AG1	10/201,893	12/12/2002	Zhao et al.			7/25/2002
	AH1	10/200,255	12/19/2002	Zhao et al.			7/23/2002
	AI1	10/101,751		Zhao et al.			3/21/2002
	AJ1	10/253,600		Zhong et al.			9/25/2002
VA	AK1	10/284,371	8/7/2003	Khan et al.			10/31/2002
<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
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	AP1						Yes No
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	AS	1					
	AT	1					
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				DATE CONSIDERED 01/13/04			



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 <b>FORM PTO-1449</b> <b>INFORMATION DISCLOSURE STATEMENT</b>		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
		APPLICANT Khan et al.	
		FILING DATE February 15, 2001	GROUP 2826

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
WA	AA2	10/284,349	8/7/2003	Khan et al.			10/31/2002
	AB2	10/284,166	8/7/2003	Zhao et al.			10/31/2002
	AC2	10/284,366	8/7/2003	Zhao et al.			10/31/2002
	AD2	5,173,766	12/22/1992	Long et al.			0625/1990
	AE2	5,216,278	6/1/1993	Lin et al.			03/02/1992
	AF2	5,285,352	2/8/1994	Pastore et al.			07/15/1992
	AG2	5,552,635	9/3/1996	Kim et al.			1/10/1995
	AH2	5,866,949	02/02/1999	Schueller			10/8/1997
	AI2	5,949,137	09/07/1999	Domadia et al.			09/26/1997
	AJ2	5,986,340	11/16/1999	Mostafazadeh et al.			5/2/1996
WA	AK2	6,084,297	7/4/2000	Brooks et al.			9/3/1998

## FOREIGN PATENT DOCUMENTS

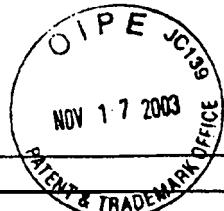
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	AP2					Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

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**DATE CONSIDERED**



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FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
		APPLICANT Khan et al.	FILING DATE February 15, 2001
		GROUP 2826	

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U.S. PATENT DOCUMENTS

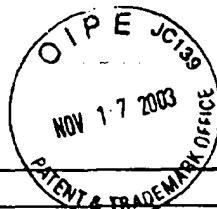
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
WA	AA3	6,246,111 B1	6/12/2001	Huang et al.			1/25/2000
	AB3	6,288,444 B1	9/11/2001	Abe et al.			6/4/1999
	AC3	6,369,455 B1	4/9/2002	Ho et al.			4/7/2000
	AD3	6,472,741 B1	10/29/2002	Chen et al.			7/14/2001
	AE3	6,525,942 B2	2/25/2003	Huang et al.			5/18/2001
	AF3	6,541,832 B2	4/1/2003	Coyle			1/19/2001
	AG3	6,545,351 B1	4/8/2003	Jamieson et al.			3/27/2000
	AH3	US2003/0138613 A1	7/24/2003	Thoman et al.			1/24/2002
	AI3	5,065,281	11/12/1991	Hernandez et al.			2/12/1990
	AJ3	5,717,252	2/10/1998	Nakashima et al.			12/2/1996
W	AK3	5,856,911	1/5/1999	Riley			11/12/1995

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL3						Yes No
	AM3						Yes No
	AN3						Yes No
	AO3						Yes No
	AP3						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	3		RECEIVED NOV 20 2003 MAIL ROOM
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EXAMINER	DATE CONSIDERED 01/08/04		



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FORM PTO-1449 <b>INFORMATION DISCLOSURE STATEMENT</b>		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
		APPLICANT Khan et al.	
		FILING DATE February 15, 2001	GROUP 2826

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**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
WA	AA4	6,313,521 B1	11/6/2001	Baba			11/3/1999
	AB4	6,462,274 B1	10/8/2002	Shim et al.			10/20/1999
	AC4	6,528,892 B2	3/4/2003	Caletka et al.			6/5/2001
	AD4	6,563,712 B2	5/13/2003	Akram et al.			5/16/2002
	AE4	6,011,694	1/4/2000	Hirakawa			8/1/1997
	AF4	5,541,450	7/30/1996	Jones et al.			11/2/1994
	AG4	6,583,516 B2	6/24/2003	Hashimoto			11/1/2001
	AH4	6,552,266 B2	4/22/2003	Carden et al.			1/26/2001
	AI4	6,002,147	12/14/1999	Iovdalsky et al.			9/26/1996
	AJ4	6,060,777	5/9/2000	Jamieson et al.			7/21/1998
WD	AK4	5,920,117	7/6/1999	Sono et al.			3/18/1997

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL3						Yes No
	AM3						Yes No
	AN3						Yes No
	AO3						Yes No
	AP3						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

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FORM PTO-1449 <b>INFORMATION DISCLOSURE STATEMENT</b>		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
		APPLICANT Khan et al.	
		FILING DATE February 15, 2001	GROUP 2826

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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
WD	AA5	5,650,659	7/22/1997	Mostafazadeh et al.			8/4/1995
	AB5	5,977,626	11/2/1999	Wang et al.			8/12/1998
	AC5	5,294,826	3/15/1994	Marcantonio et al.			4/16/1993
	AD5	6,552,428 B1	4/22/2003	Huang et al.			10/12/1999
	AE5	5,208,504	05/04/1993	Parker et al.			12/28/1990
	AF5	5,366,589	11/22/1994	Chang			11/16/1993
	AG5	5,394,009	02/28/1995	Loo			07/30/1993
	AH5	5,433,631	07/18/1995	Beaman et al.			06/29/1994
WD	AI5	5,907,903	06/01/1999	Ameen et al.			01/08/1998
	AJ5						
	AK5						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
		AL3					Yes No
		AM3					Yes No
		AN3					Yes No
		AO3					Yes No
		AP3					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	AR	5					RECEIVED FEB 20 2003 TC 2800 MAIL ROOM
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EXAMINER

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## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1875.0210000APPLICATION NO.  
09/783,034APPLICANT  
Khan et al.FILING DATE  
February 15, 2001GROUP  
2826

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
CP	AA1	5,397,921	03/1995	Karnezos	257	779	
	AB1	5,474,957	12/1995	Urushima	437	209	
	AC1	5,534,467	07/1996	Rostoker	437	209	
	AD1	09/984,259	---	Zhao et al.	---	---	10/29/2001
	AE1	09/997,272	---	Zhao et al.	---	---	11/30/2001
WT	AF1	09/742,366	---	Khan et al.	---	—	12/22/2000
	AG1						
	AH1						
	AI1						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
WT	AJ1	EP 0 504 411 B1	06/1998	EPO	H01L	23/04	Yes No
	AK1						Yes No
	AL1						Yes No
	AM1						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

WT	AN	1	Ahn, S.H. and Kwon, Y.S., "Popcorn Phenomena in a Ball Grid Array Package", IEEE Transactions on Components, Packaging, and Manufacturing Technology Part B: Advanced Packaging, IEEE, August 1995, Vol. 18, No. 3, pp. 491-96.
	AO	1	Amkor Electronics, "Amkor BGA Packaging: Taking The World By Storm", Electronic Packaging & Production, Cahners Publishing Company, May 1994, page unknown.
	AP	1	Anderson, L. and Trabucco, B., "Solder Attachment Analysis of Plastic BGA Modules", Surface Mount International Conference, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 189-194.
	AQ	1	Andrews, M., "Trends in Ball Grid Array Technology," Ball Grid Array National Symposium, March 29-30, 1995, Dallas, Texas, 10 pages.
WT	AR	1	Attarwala, A.I. Dr. and Stierman, R., "Failure Mode Analysis of a 540 Pin Plastic Ball Grid Array", Surface Mount International Conference, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 252-257.

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01/01/04

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FORM PTO-1449		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT		APPLICANT Khan et al.	
ODMA\HODMA\SKGF DC1,26458,1		FILING DATE February 15, 2001	GROUP 2826

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
AA2							
AB2							
AC2							
AD2							
AE2							
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FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
AJ2							Yes No
AK2							Yes No
AL2							Yes No
AM2							Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
<i>W</i>	AN	2	Banerji, K., "Development of the Slightly Larger Than IC Carrier (SLICC), Journal of Surface Mount Technology, July 1994, pp. 21-26.				
	AO	2	Bauer, C., Ph.D., "Partitioning and Die Selection Strategies for Cost Effective MCM Designs", Journal of Surface Mount Technology, October 1994, pp. 4-9.				
	AP	2	Bernier, W.E. et al., "BGA vs. QFP: A Summary of Tradeoffs for Selection of High I/O Components", Surface Mount International Conference Proceedings, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 181-185.				
	AQ	2	Burgos, J. et al., "Achieving Accurate Thermal Characterization Using a CFD Code-- A Case Study of Plastic Packages" IEEE Transactions on Components, Packaging, and Manufacturing Technology Part A, IEEE, December 1995, Vol. 18, No. 4, pp. 732-738.				
<i>W</i>	AR	2	Chadima, M., "Interconnecting Structure Manufacturing Technology," Ball Grid Array National Symposium, Dallas, Texas, March 29-30, 1995.				

EXAMINER		DATE CONSIDERED
<i>W</i>		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.		

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		APPLICANT Khan et al.	
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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA3						
	AB3						
	AC3						
	AD3						
	AE3						
	AF3						
	AG3						
	AH3						
	AI3						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ3						Yes No
	AK3						Yes No
	AL3						Yes No
	AM3						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

LA	AN	3	Chanchani, R. et al. "Mini BGA: Pad and Pitch Ease Die Test and Handling", Advanced Packaging, IHS Publishing Group, May/June 1995, pp.34, 36-37.
)	AO	3	Chung, T.C. et al., "Rework of Plastic, Ceramic, and Tape Ball Grid Array Assemblies", Ball Grid Array National Symposium Proceedings, Dallas, Texas, March 29-30, 1995, pp. 1-15.
)	AP	3	Cole, M.S. and Caulfield, T. "A Review of Available Ball Grid Array (BGA) Packages" Journal of Surface Mount Technology, Surface Mount Technology Association, January 1996, Vol. 9, pp. 4-11.
)	AQ	3	Cole, M.S. and Caulfield, T., "Ball Grid Array Packaging", Surface Mount International Conference Proceedings, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 147-153.

WA	AR	3	Dobers, M. and Seyffert, M., "Low Cost MCMs: BGAs Provide a Fine-Pitch Alternative", Advanced Packaging, IHS Publishing Group, September/October 1994, Vol. 3, No. 5, pp. 28, 30 and 32.
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EXAMINER: <i>[Signature]</i>	DATE CONSIDERED: <i>01/16/04</i>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

U.S. TRADEMARK OFFICE FORM PTO-1449 SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
		APPLICANT Khan et al.	
		FILING DATE February 15, 2001	GROUP 2826

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA4						
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	AH4						
	AI4						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ4						Yes No
	AK4						Yes No
	AL4						Yes No
	AM4						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>lta</i>	AN	4	Dody, G. and Burnette, T., "BGA Assembly Process and Rework", Journal of Surface Mount Technology, Surface Mount Technology Association, January 1996, Vol. 9, pp. 39-45.
<i>l</i>	AO	4	Edwards, D. et al., "The Effect of Internal Package Delaminations on the Thermal Performance of PQFP, Thermally Enhanced PQFP, LOC and BGA Packages", 45th Electronic Components & Technology Conference, IEEE, May 21-24, 1995, Las Vegas, NV, pp. 285-292.
	AP	4	Ejim, T.L. et al., "Designed Experiment to Determine Attachment Reliability Drivers for PBGA Packages", Journal of Surface Mount Technology, Surface Mount Technology Association, January 1996, Vol. 9, pp. 30-38.
	AQ	4	Ewanich, J. et al., "Development of a Tab (TCP) Ball Grid Array Package", Proceedings of the 1995 International Electronics Packaging Conference, San Diego, CA, September 24-27, 1995, pp. 588-594.

<i>W</i>	AR	4	Fauser, S. et al., "High Pin-Count PBGA Assembly", Circuits Assembly, February 1995, Vol 6, No. 2, pp. 36-38 and 40.
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EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

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## U.S. PATENT DOCUMENTS

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	AI5						

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	AK5						Yes No
	AL5						Yes No
	AM5						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>WA</i>	AN	5	Fauser, Suzanne et al., "High Pin Count PBGA Assembly: Solder Defect Failure Modes and Root Cause Analysis", Surface Mount International, Proceedings of The Technical Program, Surface Mount International, August 28-September1, 1994, San Jose, California, pp. 169-174.
<i> </i>	AO	5	Ferguson, M. "Ensuring High-Yield BGA Assembly", Circuits Assembly, February 1995, Vol. 6, No. 2, pp. 54, 56 and 58.
<i> </i>	AP	5	Freida, M., "Laminate Technology for IC Packaging", Electronic Packaging & Production, Cahners Publishing Company, October 1995, Vol. 35, No. 11, pp. S4-S5.
<i> </i>	AQ	5	Freedman, M., "Package Size and Pin-Out Standardization", Ball Grid Array National Symposium, March 29-30, 1995, 7 pages.

<i>WA</i>	AR	5	Freyman, B and Pennisi, R, "Over-molded Plastic Pad Array Carriers (OMPAC): A Low Cost, High Interconnect Density IC Packaging Solution for Consumer and Industrial Electronics", 41st Electronic Components & Technology Conference, IEEE, May 11-16, 1991, pp. 176-82.
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

JAN 12 2004 U.S. PATENT & TRADEMARK OFFICE					ATTY. DOCKET NO. 1875.0210000			APPLICATION NO. 09/783,034	
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT					APPLICANT Khan et al.				
					FILING DATE February 15, 2001			GROUP 2826	
<b>U.S. PATENT DOCUMENTS</b>									
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE		
	AA6								
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	AC6								
	AD6								
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<b>FOREIGN PATENT DOCUMENTS</b>									
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION		
	AJ6						No		
	AK6						Yes No		
	AL6						Yes No		
	AM6						Yes No		
<b>OTHER (Including Author, Title, Date, Pertinent Pages, etc.)</b>									
<i>W</i>	AN	<u>6</u>	Freyman, B. et al., "Surface Mount Process Technology for Ball Grid Array Packaging", Surface Mount International Conference Proceedings, Surface Mount International, August 29-September 2, 1993, San Jose, California, pp. 81-85.						
<i>W</i>	AO	<u>6</u>	Freyman, B. et al., "The Move to Perimeter Plastic BGAs", Surface Mount International Conference Proceedings, San Jose, CA, August 29-31, 1995, pp. 373-382.						
<i>W</i>	AP	<u>6</u>	Freyman, B. "Trends in Plastic BGA Packaging," Ball Grid Array National Symposium, Dallas, Texas, March 29-30, 1995, 45 pages.						
<i>W</i>	AQ	<u>6</u>	Gilleo, K., "Electronic Polymers: Die Attach and Oriented Z-Axis Films", Advanced Packaging, IHS Publishing Group, September/October 1994, Vol. 3, No. 5, pp. 37-38, 40 and 42.						
<i>W</i>	AR	<u>6</u>	Guenin, B. et al., "Analysis of a Thermally Enhanced Ball Grid Array Package", IEEE Transactions on Components, Packaging, and Manufacturing Technology, Part A, IEEE Components, Packaging, and Manufacturing Technology Society, December 1995, Vol. 18, No. 4, pp. 749-757.						
EXAMINER							DATE CONSIDERED <i>01/01/01</i>		
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.									

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			FILING DATE February 15, 2001		GROUP 2826		
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA7						
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<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ7						Yes No
	AK7						Yes No
	AL7						Yes No
	AM7						Yes No
<b>OTHER (Including Author, Title, Date, Pertinent Pages, etc.)</b>							
<i>WA</i>	AN	<u>Z</u>	Hart, C., "Vias in Pads for Coarse and Fine Pitch Ball Grid Arrays", Surface Mount International Conference Proceedings, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 203-207.				
	AO	<u>Z</u>	Hart, C. "Vias in Pads", Circuits Assembly, February 1995, Vol. 6, No. 2, pp. 42, 44-46 and 50.				
	AP	<u>Z</u>	Hattas, D., "BGAs Face Production Testing: New Package Offers Promise but Must Clear Technology Hurdles.", Advanced Packaging, IHS Publishing Group, Summer 1993, Vol. 2, No. 3, pp. 44-46.				
	AQ	<u>Z</u>	Heitmann, R., "A Direct Attach Evolution: TAB, COB and Flip Chip Assembly Challenges", Advanced Packaging, IHS Publishing Group, July/August 1994, Vol. 3, No. 4, pp. 95-99 and 103.				
<i>WA</i>	AR	<u>Z</u>	Hodson, T., "Study Examines BGA Use", Electronic Packaging & Production, March 1993, page unknown.				
EXAMINER <i>WA</i>					DATE CONSIDERED <i>01/08/04</i>		
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							
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FORM PTO-1449

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1875.0210000APPLICATION NO.  
09/783,034APPLICANT  
Khan et al.FILING DATE  
February 15, 2001GROUP  
2826**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AAB						
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	AC8						
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**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ8						Yes No
	AK8						Yes No
	AL8						Yes No
	AM8						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

<i>JA</i>	AN	<u>8</u>	Holden, H., "The Many Techniques of Small Via Formation for Thin Boards", The Institute for Interconnecting and Packaging Electronic Circuits Ball Grid Array National Symposium, San Diego, CA, January 18-19, 1996, pp. 1-7.
	AO	<u>8</u>	Houghten, J., "New Package Takes On QFPs", Advanced Packaging, IHS Publishing Group, Winter 1993, Vol. 2, No. 1, pp. 38-39.
	AP	<u>8</u>	"How To Give Your BGAs A Better Bottom Line.", Advanced Packaging, IHS Publishing Group, January/February 1995, page unknown.
	AQ	<u>8</u>	Huang, W. and Ricks, J., "Electrical Characterization of PBGA for Communication Applications by Simulation and Measurement", National Electronic Packaging and Production Conference West '95, February 26-March 2, 1995, Anaheim, California, pp. 300-307.
<i>JA</i>	AR	<u>8</u>	Hundt, M. et al., "Thermal Enhancements of Ball Grid Arrays", National Electronic Packaging and Production Conference West '95, Reed Exhibition Companies, Anaheim, CA, February 25-29, 1996, pp. 702-711.

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FORM PTO-1449		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA9						
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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ9						Yes No
	AK9						Yes No
	AL9						Yes No
	AM9						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>JA</i>	AN	9	Hutchins, C.L., "Understanding Grid Array Packages", Surface Mount Technology Magazine, IHS Publishing Group, November 1994, Vol. 8, No. 11, pp. 12-13.
	AO	9	Hwang, J.S., "Reliability of BGA Solder Interconnections", Surface Mount Technology Magazine, IHS Publishing Group, September 1994, Vol. 8, No. 9, pp. 14-15.
	AP	9	Hwang, J.S., "A Hybrid of QFP and BGA Architectures", Surface Mount Technology Magazine, IHS Publishing Group, February 1995, Vol. 9, No. 2, p. 18.
	AQ	9	Johnson, R. et al., "A Feasibility Study of of Ball Grid Array Packaging", National Electronic Packaging and Production Conference East '93, Boston, Massachusetts, June 14-17, 1993, pp. 413-422.
<i>W</i>	AR	9	Johnson, R. et al., "Thermal Characterization of 140 and 225 Pin Ball Grid Array Packages", National Electronic Packaging & Production Conference East '93, Boston, Massachusetts, June 14-17, 1993, pp. 423-430.

EXAMINER	DATE CONSIDERED
<i>JA</i>	<i>01/07/01</i>

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 <i>JAN 8 2 2004</i> SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA10						
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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ10						Yes No
	AK10						Yes No
	AL10						Yes No
	AM10						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>VA</i>	AN	<u>10</u>	Johnston, P., "Land Pattern Interconnectivity Schemes", Ball Grid Array National Symposium, Dallas, Texas, March 29-30, 1995, pages 2-21.
	AO	<u>10</u>	Johnston, P. "Printed Circuit Board Design Guidelines for Ball Grid Array Packages", Journal of Surface Mount Technology, Surface Mount Technology Association, January 1996, Vol. 9, pp. 12-18.
	AP	<u>10</u>	Kawahara, T. et al., "Ball Grid Array Type Package By Using of New Encapsulation Method", Proceedings of the 1995 International Electronics Packaging Conference, San Diego, CA, September 24-27, 1995, pp. 577-587.
	AQ	<u>10</u>	Knickerbocker, J.U. and Cole, M.S., "Ceramic BGA: A Packaging Alternative", Advanced Packaging, IHS Publishing Group, January/February 1995, Vol. 4, No. 1, pp. 20, 22 and 25.
<i>W</i>	AR	<u>10</u>	Kromann, G., et al., "A Hi-Density C4/CBGA Interconnect Technology for a CMOS Microprocessor" National Electronic Packaging and Production Conference West '95, IEEE, February 26-March 2, 1995, Anaheim, California, pp. 1523-1529.

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FORM PTO-1449		ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
AJ11							Yes No
AK11							Yes No
AL11							Yes No
AM11							Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>JA</i>	AN	<u>11</u>	Kunkle, R., "Discrete Wiring for Array Packages", Ball Grid Array National Symposium, Dallas, Texas, March 29-30, 1995, 9 pages.
<i> </i>	AO	<u>11</u>	Lall, B. et al, "Methodology for Thermal Evaluation of Multichip Modules", IEEE Transactions on Components, Packaging, and Manufacturing Technology Part A, IEEE, December 1995, Vol. 18, No. 4, pp. 758-764.
<i> </i>	AP	<u>11</u>	Lasance, C. et al., "Thermal Characterization of Electronic Devices with Boundary Condition Independent Compact Models", IEEE Transactions on Components, Packaging, and Manufacturing Technology Part A, IEEE Components, Packaging, and Manufacturing Technology Society, December 1995, Vol. 18, No. 4, pp. 723-731.
<i> </i>	AQ	<u>11</u>	Lau, J., "Ball Grid Array Technology", McGraw-Hill Inc., 1995, entire book submitted.

EXAMINER	<i> </i>	DATE CONSIDERED
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		APPLICANT Khan et al.	FILING DATE February 15, 2001
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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
AA12						
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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
AJ12						Yes No
AK12						Yes No
AL12						Yes No
AM12						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>WA</i>	AN	<u>12</u>	"Literature Review", Special Supplement to Electronic Packaging & Production, February 1995, Cahners Publication, 10 pages.
<i>WA</i>	AO	<u>12</u>	LSI LOGIC Package Selector Guide, Second Edition, LSI Logic Corporation, 1994-1995, entire document submitted.
<i>WA</i>	AP	<u>12</u>	"LTCC MCMs Lead to Ceramic BGAs," Advanced Packaging, IHS Publishing Group, September/October 1994, Vol. 3, No. 5, pp. 14-15.
<i>WA</i>	AQ	<u>12</u>	Mak, Dr. W.C. et al., "Increased SOIC Power Dissipation Capability Through Board Design and Finite Element Modeling", Journal of Surface Mount Technology, Surface Mount International, October 1994, pp. 33-41.
<i>WA</i>	AR	<u>12</u>	Marrs, R.C. and Olachea, G., "BGAs For MCMs: Changing Markets and Product Functionality", Advanced Packaging, IHS Publishing Group, September/October 1994, Vol. 3, No. 5, pp. 48, 50, and 52.

EXAMINER

DATE CONSIDERED

*01/04/04*

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<b>FORM PTO-1449</b> <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</b>					<b>ATTY. DOCKET NO.</b> <b>1875.0210000</b>			<b>APPLICATION NO.</b> <b>09/783,034</b>	
<b>U.S. PATENT DOCUMENTS</b>					<b>APPLICANT</b> <b>Khan et al.</b>				
<b>FILING DATE</b> <b>February 15, 2001</b>					<b>GROUP</b> <b>2826</b>				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME		CLASS	SUB-CLASS	FILING DATE		
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FOREIGN PATENT DOCUMENTS									
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	TRANSLATION		
AJ13							Yes No		
AK13							Yes No		
AL13							Yes No		
AM13							Yes No		
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)									
AN	13	Matthew, L.C. et al., "Area Array Packaging: KGD in a Chip-Sized Package", Advanced Packaging, IHS Publishing Group, July/August 1994, pp. 91-94.							
AO	13	Mawer, A. et al., "Plastic BGA Solder Joint Reliability Considerations", Surface Mount International Conference Proceedings, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 239-251.							
AP	13	Mazzullo, T. and Schaertl, L., "How IC Packages Affect PCB Design", Surface Mount Technology Magazine, February 1995, Vol. 9, No. 2, pp. 114-116.							
AQ	13	Mearig, J., "An Overview of Manufacturing BGA Technology", National Electronic Packaging and Production Conference West '95, February 26-March 2, 1995, Anaheim, California, pp. 295-299.							
AR	13	Mertol, A., "Application of the Taguchi Method on the Robust Design of Molded 225 Plastic Ball Grid Array Packages" IEEE Transactions on Components, Packaging, and Manufacturing Technology Part B: Advanced Packaging, IEEE, November 1995, Vol. 18, No. 4, pp. 734-743.							
EXAMINER					DATE CONSIDERED				
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.									

<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px; font-weight: bold;">61P5</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px; font-weight: bold;">JCGS</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px; font-weight: bold;">JAN 02 2004</span>					<b>ATTY. DOCKET NO.</b> 1875.0210000 <b>APPLICATION NO.</b> 09/783,034			
<b>FORM PTO-1449.</b> <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</b>					<b>APPLICANT</b> Khan et al.			
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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME			CLASS	SUB-CLASS	FILING DATE
AA14	AB14	AC14	AD14	AE14	AF14	AG14	AH14	AI14
<b>FOREIGN PATENT DOCUMENTS</b>								
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY			CLASS	SUB-CLASS	TRANSLATION
AJ14	AK14	AL14	AM14	Yes	No	Yes	No	Yes
<b>OTHER (Including Author, Title, Date, Pertinent Pages, etc.)</b>								
IA	AN	14	Mescher, P. and Phelan, G., "A Practical Comparison of Surface Mount Assembly for Ball Grid Array Components", Surface Mount International Conference Proceedings, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 164-168.					
	AO	14	Mulgaonker, S. et al., "An Assessment of the Thermal Performance of the PBGA Family", Eleventh Annual IEEE Semiconductor Thermal Measurement and Management Symposium, IEEE, San Jose, CA, February 7-9, 1995, pp. 17-27.					
	AP	14	"New PBGA Pushes Technology to Outer Limits", Advanced Packaging, IHS Publishing Group, January/February 1995, page 11.					
	AQ	14	Olachea, G., "Managing Heat: A Focus on Power IC Packaging", Electronic Packaging & Production (Special Supplement), Cahners Publishing Company, November 1994, pp. 26-28.					
	AR	14	"Pad Array Improves Density", Electronic Packaging & Production, Cahners Publishing Company, May 1992, pp. 25-26.					
<b>EXAMINER</b>					<b>DATE CONSIDERED</b>			
<b>EXAMINER</b> Initial if reference considered. Whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.								

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FORM PTO-1449

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
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## U.S. PATENT DOCUMENTS

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		AA15					
		AB15					
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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
		AJ15					Yes No
		AK15					Yes No
		AL15					Yes No
		AM15					Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>WA</i>	AN	15	Partridge, J. and Viswanadham, P., "Organic Carrier Requirements for Flip Chip Assemblies", Journal of Surface Mount Technology, Surface Mount Technology Association, July 1994, pp. 15-20.
<i>W</i>	AO	15	Ramirez, C. and Fauser, S., "Fatigue Life Comparison of The Perimeter and Full Plastic Ball Grid Array", Surface Mount International Conference Proceedings, Surface Mount International, August 28-September1, 1994, San Jose, California, pp. 258-266.
	AP	15	Rogren, P., "MCM-L Built on Ball Grid Array Formats", National Electronic Packaging and Production Conference West '94, Anaheim, California, pp. 1277-1282.
	AQ	15	Rooks, S., "X-Ray Inspection of Flip Chip Attach Using Digital Tomosynthesis", Surface Mount International, Proceedings of The Technical Program, August 28-September1, 1994, San Jose, California, pp. 195-202.
<i>W</i>	AR	15	Rukavina, J., "Attachment Methodologies: Ball Grid Array Technology", Ball Grid Array National Symposium, Dallas, Texas, March 29-30, 1995, 37 pages.

EXAMINER

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**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
		AA16					
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**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
		AJ16					Yes No
		AK16					Yes No
		AL16					Yes No
		AM16					Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

<i>WA</i>	AN	<u>16</u>	Sack, T. "Inspection Technology", Ball Grid Array National Symposium, Dallas, Texas, March 29-30, 1995, pages 1-41.
	AO	<u>16</u>	Sakaguchi, H., "BGA Mounting Technology," pgs. 1-4, date and source unknown.
	AP	<u>16</u>	Schmolze, C. and Fraser, A., "SPICE Modeling Helps Enhance BGA Performance", Electronic Packaging & Production, January 1995, pp. 50-52.
	AQ	<u>16</u>	Semiconductor Group Package Outlines Reference Guide, Texas Instruments, 1995, entire document submitted.
<i>AR</i>	AR	<u>16</u>	Shimizu, J., "Plastic Ball Grid Array Coplanarity", Surface Mount International Conference, San Jose, California, August 31-September 2, 1993, pp. 86-91.

EXAMINER

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**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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		APPLICANT Khan et al.	
		FILING DATE February 15, 2001	GROUP 2826

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA17						
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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ17						Yes No
	AK17						Yes No
	AL17						Yes No
	AM17						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AN	17	Sigliano, R., "Using BGA Packages: An Appealing Technology in a QFP and Fine-Pitch Market", Advanced Packaging, IHS Publishing Group, March/April 1994, pp. 36-39.
	AO	17	Sirois, L., "Dispensing for BGA: Automated Liquid Dispensing in a High-Density Environment", Advanced Packaging, IHS Publishing Group, May/June 1995, pp. 38 and 41.
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	AR	17	Tuck, J., "BGA Technology Branches Out", Circuits Assembly, February 1995, Vol. 6, No. 2, pp. 24, 26, and 28.

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT		APPLICANT Khan et al.	
		FILING DATE February 15, 2001	GROUP 2826

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
AA18						
AB18						
AC18						
AD18						
AE18						
AF18						
AG18						
AH18						
AI18						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
AI18						Yes No
AK18						Yes No
AL18						Yes No
AM18						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>AA</i>	AN	18	"Tutorial and Short Courses", 45th Electronic Components & Technology Conference, May 21-24, 1995, Las Vegas, Nevada, IEEE, 6 pages.
	AO	18	Vardaman, E. J. and Crowley, R.T., "Worldwide Trends In Ball Grid Array Developments", National Electronic Packaging and Production Conference West '96, Reed Exhibition Companies, Anaheim, CA, February 25-29, 1996, pp. 699-701.
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JAN 8 2 2004 U.S. PATENT & TRADEMARK OFFICE			ATTY. DOCKET NO. 1875.0210000	APPLICATION NO. 09/783,034
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT			APPLICANT Khan et al.	
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA19						
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	AJ19						Yes No
	AK19						Yes No
	AL19						Yes No
	AM19						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>WA</i>	AN	<u>19</u>	Yip, W.Y., "Package Characterization of a 313 Pin BGA", National Electronic Packaging and Production Conference West '95, Reed Exhibition Companies, February 26-March 2, 1995, Anaheim, California, pp. 1530-1541.
<i>J</i>	AO	<u>19</u>	Zamborsky, E., "BGAs in the Assembly Process", Circuits Assembly, February 1995, Vol. 6, No. 2, pp. 60, 62-64.
<i>J</i>	AP	<u>19</u>	Zimerman, M., "High Performance BGA Molded Packages for MCM Application", Surface Mount International Conference Proceedings, Surface Mount International, August 28-September 1, 1994, San Jose, California, pp. 175-180.
<i>J</i>	AQ	<u>19</u>	Zweig, G., "BGAs: Inspect the Process, Not the Product", Electronic Packaging & Production (Special Supplement), Cahners Publishing Company, August 1994 (Supplement), p. 41.

<i>W</i>	AR	<u>19</u>	Houghten, J.L., "Plastic Ball-Grid Arrays Continue To Evolve", Electronic Design, February 6, 1995, pp. 141-146.
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<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA20						
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<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ20						Yes No
	AK20						Yes No
	AL20						Yes No
	AM20						Yes No
<b>OTHER (Including Author, Title, Date, Pertinent Pages, etc.)</b>							
<i>WA</i>	AN	<u>20</u>	Marrs, R. et al., "Recent Technology Breakthroughs Achieved with the New SuperBGA® Package", 1995 International Electronics Packaging Conference, San Diego, California, September 24-27, 1995, pp. 565-576.				
<i>WA</i>	AO	<u>20</u>	Hayden, T.F. et al., "Thermal & Electrical Performance and Reliability Results for Cavity-Up Enhanced BGAs", Electronic Components and Technology Conference, IEEE, 1999, pp. 638-644.				
<i>WA</i>	AP	<u>20</u>	Thompson, T., "Reliability Assessment of a Thin (Flex) BGA Using a Polyimide Tape Substrate", International Electronics Manufacturing Technology Symposium, IEEE, 1999, pp. 207-213.				
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	AR	<u>20</u>					
EXAMINER: <i>WA</i>					DATE CONSIDERED: <i>2/20/04 Sat</i>		
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